

CLAIMS

1. A GPS receiver comprising a GPS antenna and a GPS RF front-end including an analogue to digital converter for sampling received GPS signals;
5 and a processor for outputting the GPS signal samples together with ancillary information either directly or indirectly describing characteristics of the GPS signal samples and / or the GPS signals contained therein.
2. A GPS receiver according to claim 1 wherein the GPS signal samples
10 and ancillary information are outputted to an external device.
3. A GPS receiver according to claim 1 wherein the ancillary information includes information relating to the type or identity of the GPS receiver.
- 15 4. A GPS receiver according to claim 1 wherein the ancillary information includes information relating to the GPS signal received by the GPS receiver
5. A GPS receiver according to claim 4 wherein the ancillary information includes either the type or identity of the received GPS signal, or the received
20 GPS signal(s) format, centre frequency or bandwidth.
6. A GPS receiver according to claim 1 wherein the ancillary information includes information relating to the GPS samples outputted by the GPS receiver.
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7. A GPS receiver according to claim 6 wherein the ancillary information includes either the outputted GPS signal carrier frequency or bandwidth, the GPS signal sample format, rate or resolution, the image sign, the oscillator type or oscillator stability parameters, or the antenna type.
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8. A GPS receiver according to claim 1 further comprising user input means with which the user is able to directly select one of a plurality of operating modes of the GPS receiver.

- 5 9. A method of providing a position fix comprising the steps of:
- receiving from a GPS receiver GPS signal samples together with ancillary information describing characteristics of the GPS signal samples and / or the GPS signals contained therein; and
 - processing the GPS signal samples using the ancillary information to
- 10 determine a position fix.

10. A method according to claim 9 wherein the GPS signal is a spread spectrum signal; and wherein the ancillary information is used to assist despread-
ing of the GPS spread spectrum signal.

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11. A method according to claim 9 wherein the GPS signal samples and ancillary information are received from an external device.

12. A method according to claim 9 wherein the ancillary information
20 includes information relating to the type or identity of the GPS receiver.

13. A method according to claim 9 wherein the ancillary information includes information relating to the GPS signal received by the GPS receiver.

25 14. A method according to claim 13 wherein the ancillary information includes either the type or identity of the received GPS signal, or the received GPS signal(s) format, centre frequency or bandwidth.

30 15. A method according to claim 9 wherein the ancillary information includes information relating to the GPS samples outputted by the GPS receiver.

16. A method according to claim 15 wherein the ancillary information includes either the outputted GPS signal carrier frequency or bandwidth, the GPS signal sample format, rate or resolution, the image sign, the oscillator
5 type or oscillator stability parameters, or the antenna type.

17. A computer program comprising instructions for performing a method according to any of claims 9 to 16.

10 18. A computer-readable storage medium having recorded thereon data containing instructions for performing a method according to any of claims 9 to 16.

15 19. Apparatus configured to perform a method according to any of claims 9 to 16.

20. Apparatus according to claim 19 configured to connect to a GPS receiver of the type claimed in any of claims 1 to 8.
the same.